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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/069,278	06/11/2002	Helmut Brehm	5003073-026US1	7874

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EXAMINER

ASINOVSKY, OLGA NMN

ART UNIT PAPER NUMBER

1711

DATE MAILED: 12/19/2002

7

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.  
10/069,278

Applicant(s)  
Brehm et al

Examiner  
Olga Asinovsky

Art Unit  
1711



— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Jun 11, 2002
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5-15, and 17-24 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-15, and 17-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some\* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 5 6) ☐ Other:

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### DETAILED ACTION

The preliminary amendment is noted.

#### *Claim Rejections - 35 USC § 112*

1. Claims 1-3, 5-15 and 17-24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 should be amended to read as -A powdered, crosslinked polymer composition-

In claim 1, line 10, the phrase “can be obtained” renders the claim indefinite, because it is unclear whether the limitations following the phrase are part of the invention.

See MPEP § 2173.05(d). There is no evidence that a composition in claim 1 is limited to a product produced “by continuous polymerization wherein at least one parameter biasing the polymerization is varied according to a recurring pattern.”

Claim 1, the last line, recites “according to a recurring pattern.” There is no definition to a “recurring pattern.” It is not clear what Applicants intend to “according to a recurring pattern.”

Claim 3 recites “the oscillation is harmonic or anharmonic and preferably undamped.” The recitation is improper under Markush practice, and the recitation of a preferred embodiment within a claim renders the claim indefinite.

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Claim 13, the last line, recites “according to a recurring pattern.” There is no definition to a “recurring pattern.” It is not clear what Applicants intend to “according to a recurring pattern.”

Claim 15 recites “the oscillation is harmonic or anharmonic and preferably undamped.” The recitation is improper under Markush practice, and the recitation of a preferred embodiment within a claim renders the claim indefinite.

Claims 20-24 provide for the use of the polymer composition, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claims 20-24 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Claim 23 recites “preferably foamed sheet materials.” The recitation of the preferred embodiment within a claim renders the claim indefinite.

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The disclosure is objected to because of the following informalities: In the specification on page 11, line 19, the abbreviation for "polyethylene glycol (10EO) allyl ether acrylate is not correct. Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 6-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Dahmen et al U.S. Patent 5,712,316.

Claim 1 discloses "powdered, crosslinked polymer compositions for absorbing aqueous or serous fluids, as well as blood, comprising: a) 55-99.9 wt.% of at least one polymerized, ethylenically unsaturated, polymerizable monomer which contains acid groups neutralized to at least 25 mole %; b) 0-40 wt.% of polymerized, unsaturated monomers copolymerizable with a); c) 0.01-5.0 wt.% of one or more crosslinking agent; d) 0-30 wt.% of a water-soluble polymer, the weight amounts a) through d) being based on anhydrous polymer composition, and the sum of these components always being 100 wt.%, which compositions can be obtained by continuous

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polymerization wherein at least one parameter biasing the polymerization is varied according to a recurring pattern.”

Dahmen discloses powder-form crosslinked polymers for absorbing aqueous liquids. A composition comprising: a) 55-99.9 wt.% of unsaturated, polymerizable acid-groups containing monomers, said monomers being present as salts neutralized to the extent of at least 50 mole %, b) 0-40 wt. % of unsaturated monomers which are copolymerized with a), c) 0.1-5 wt.% of at least one cross-linking agent, d) 0-30 wt.% of a water-soluble polymer, with the sum of a)-d) amounting to 100 wt.%, and e) 0.1-5.0 wt.% relative to the sum of a)-d), of a blowing agent, column 10, claim 1. The formulation of the composition in Dahmen is analogous to the composition in the present claim 1. The water-soluble polymer such as polyvinyl alcohol and starch are readable in the present claim 11, column 4, lines 59-62 and column 5, line 8. The acid group is neutralized to 50 to 80 mole %, column 4, line 30, that is readable in the present claims 8-9. The polymer may be manufactured by continuous polymerization process, column 6, line 15. The polymerization temperature and the thermal treatment are depending on the residence time and the kind of reactant for obtaining the product having the desired properties, column 6, lines 7-10. The thermal treatment is carried out in conventional dryers including rotary kilns, fluidized bed dryers or infrared dryers, column 6, lines 12-14. Therefore, the continuous polymerization process conditions for producing the same composition in Dahmen would be inherent to the applicants' claimed “compositions can be obtained by continuous polymerization wherein at least

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one parameter biasing the polymerization is varied according to a recurring pattern", since at least the temperature and the residence time have influence on the polymerization conditions.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

(A) Claims 1-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dahnen et al U.S. Patent 5,712,316.

Dahmen' 316 has been discussed in the paragraph 2 above.

Claim 1 discloses a composition which "can be obtained by continuous polymerization wherein at least one parameter biasing the polymerization is varied according to a recurring pattern."

The independent claim 13 discloses a process for the continuous polymerization of powdered, crosslinked polymer compositions (the same as disclosed in the present claim 1), wherein "the monomer solution being polymerized to form a gel, said gel being dried and crushed, characterized in that at least one parameter biasing the polymerization is varied according to a recurring pattern." The polymerization is effected on a moving support, in the present claim 17.

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Dahmen discloses the same composition in the form of polymer gels which can be produced by continuous polymerization process, column 6, line 15. The ingredients are mixing in suitable mixers including fluidized bed mixers, paddle mixers, milling rolls, or twin-worm-mixers, column 5, lines 65-67. The thermal treatment may be carried out in conventional dryers or ovens including rotary kilns, column 6, lines 5-14. It would have been obvious to one of ordinary skill in the art to use the composition in Dahmen and to select the continuous polymerization process disclosed by Dahmen in such conditions that the continuous polymerization is obtained in a suitable mixer having a moving support because suitable mixers can be any mixer.

4.(B) Claims 1-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dahmen et al U.S.Patent 5,712,316 in view of Yada et al U.S.Patent 4,690,788.

Reference to Dahmen has been discussed in the paragraphs 2 and 3.

Yada discloses a continuous process for producing particles of polymer gel prepared by polymerizing an aqueous solution of water-soluble vinyl monomers onto a moving support, column 4, lines 48-58. It would have been obvious to one of ordinary skill in the art to use a polymer gel in Dahmen which can be manufactured on the moving support as suggested by Yada since the continuous polymerization process in Dahmen can include any suitable equipment= mixer, column 5, lines 66-67.



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The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art is relevant to show the state of the art knowledge.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Olga Asinovsky whose telephone number is (703) 308-0041. The examiner can normally be reached on Monday to Friday from 9am to 5:30pm.

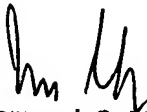
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck, can be reached on (703) 308-2462. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-7718 and (703) 872-9311 after final.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

O.A.

O.A.

December 12, 2002

  
James J. Seidleck  
Supervisory Patent Examiner  
Technology Center 1700